

# Range extension of African Broadbill *Smithornis capensis* into Soutpansberg, Northern Province, South Africa

C.T. Symes and M.R. Perrin

Le Projet d'Atlas Ornithologique Sud Africain n'a pas constaté la présence de l'Eurylaïme du Cap *Smithornis capensis* dans le nord-ouest de la Province du Nord, Afrique du Sud. La capture d'une femelle et les nombreuses mentions de l'espèce au Levubu et dans l'est du Soutpansberg semblent toutefois indiquer que l'Eurylaïme du Cap n'y est pas accidentel et pourrait par contre être assez régulier dans la région. La présence de l'espèce a été constatée dans cinq carrés d'un quart de degré du Soutpansberg oriental dans lesquels elle n'avait pas été trouvée auparavant. La Luvuvhu et la Mutale, qui traversent le nord du Parc National du Kruger, et la confluence des rivières Limpopo-Luvuvhu pourraient servir de voies de migration vers la région de Soutpansberg, où l'oiseau pourrait nicher comme hôte d'été. Les implications pour la conservation sont examinées.

## Introduction

The northernmost mountain range in South Africa, the Soutpansberg, lies at 23°05'S–22°25'S, and 29°17'E–31°20'E (Fig. 1). Altitude is 300–1,719 m, at Hanglip, and 1,748 m at Letjuna. The Soutpansberg's geology developed c1,700 million years ago during an east–west faulting of the Limpopo Mobile Belt, which caused dipping to the north and rising to the south<sup>1</sup>. The mountains end north of Thohoyandou, between the Luvuvhu and Mutale rivers (Fig. 1). Forest is prominent on south-facing slopes in the south of the range, but is not aspect-dependent at

high altitudes. Rainfall is seasonal, falling mostly in the summer (October–March). Entabeni receives highest rainfall (c1,800 mm/year), with the Drakensberg rainshadow causing Louis Trichardt, to the west, to receive c540 mm/year<sup>2</sup>. Rainfall decreases to the east, with Punda Maria, at c200 m, receiving c620 mm/year<sup>2</sup>. Temperatures are hot in summer, but cooler with increased altitude in the mountains.

The Luvuvhu River originates east of Louis Trichardt and flows west–east along the south of the range. East of the Soutpansberg it turns north–east, meeting the Limpopo River at Crooks Corner in

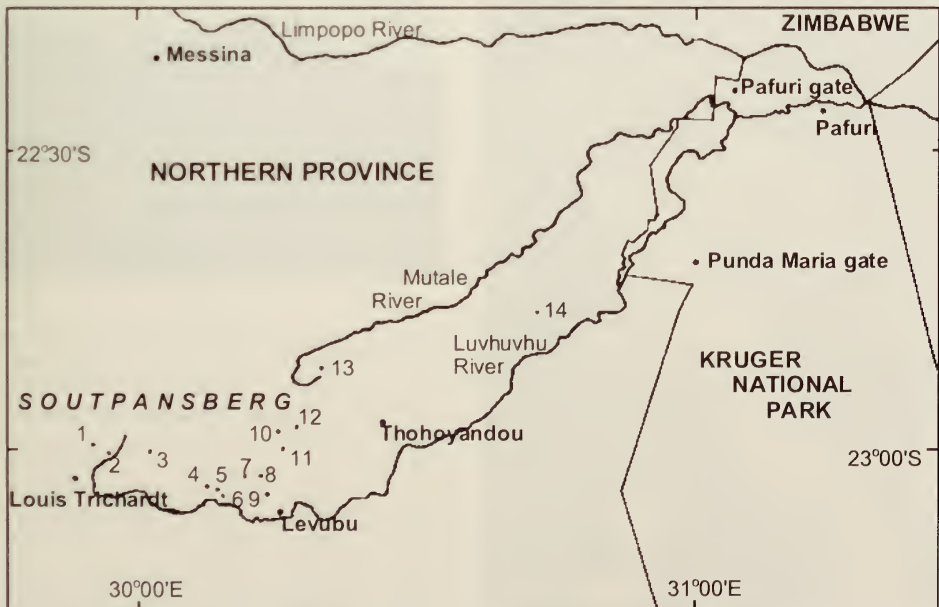


Fig 1. Map of the study area. Numbers correspond to sites in Table 1.



1



3



4



2



5

Figures 1–2. Female African Broadbill *Smithornis capensis*, Vireers Farm (site 9), 1 October 1999 and retrapped 66 days later when it had a prominent brood-patch (Craig Symes)

Figures 3–4. View from Vireers Farm (site 9) towards Soutpansberg Mts, illustrating African Broadbill *Smithornis capensis* habitat: Afromontane forest and commercial evergreen plantations are visible on the distant slopes (Craig Symes)

Figure 5. Dry lowland semi-deciduous forest at Ratombo (site 7) (Craig Symes)

northern Kruger National Park. The Mutale River originates at Thathe Vondo, flows north-east and joins the Luvuvhu in north-west Kruger National Park, near Pafuri Gate (see Fig. 1). Although the geological features of the Soutpansberg extend as far north-east as Pafuri, it is in the region between these rivers, in the east, where altitude decreases, that the Afromontane elements of Soutpansberg begin to decrease<sup>8</sup>.

African Broadbill *Smithornis capensis* is an uncommon endemic resident in Africa<sup>1,10,11</sup>. It is the only broadbill in the southern African subregion and inhabits a variety of habitats, including dense woodland, riparian forest, miombo woodland, lower storeys of evergreen forest, and deciduous thickets<sup>10,11</sup>. In southern Africa its range extends from the KwaZulu-Natal south coast, north into Mozambique and through the Zambezi Valley to the western Caprivi of Namibia<sup>1,10,11,12</sup>. It is a rare resident in Swaziland<sup>11</sup> and very scarce in the former Transvaal<sup>10</sup>. In the south its range extends to Port Shepstone (30°45'S 30°20'E), where it inhabits evergreen forest and coastal scrub<sup>7</sup>. In Mozambique a southern population, in coastal woodland and forest, is disjunct from those in the north, which largely occur in *Audrostachys johnsonii* forest<sup>11</sup>. Throughout the Zambezi Valley it occurs in dry scrub-bush associated with riverine forest, and in the Eastern Districts in rain forest at the Haroni-Lusitu confluence and lower Pungwe River areas<sup>11</sup>. It may be an overlooked resident of riverine forest in the Okavango Delta, Botswana<sup>10</sup>. It is usually silent and inactive in low vegetation, and consequently easily overlooked<sup>15</sup>.

While bird ringing at a site near Levubu (Table 1; site 9) a female African Broadbill was captured. Additional sightings were made at nearby Ratombo (site 7), a dry lowland semi-deciduous forest<sup>7</sup>. The South African Bird Atlas Project did not record the species in this region, the nearest occurrences being

in south-east Zimbabwe, c250–300 km distant<sup>4</sup>. Several subspecies are recognised and our records are probably of *conjunctus*. These records prompted an investigation into the presence of African Broadbill in the region.

## Methods

Records of African Broadbill in the Soutpansberg, west of Kruger National Park, were located in the literature. Additional data, gathered from birders who had recorded it in this region, were obtained and the following information collated: 1) locality, 2) altitude, 3) grid reference, 4) date of recording, 5) identification, and 6) reference/recorder.

## Results and discussion

African Broadbill has been found in five quarter-degree squares not recorded in the South African Bird Atlas Project (2229DD Wyllies Poort, 2230CD Thohoyandou, 2230DC Makondo, 2329BB Louis Trichardt, 2330AA Ratombo)<sup>1</sup>. These records are summarised in Table 1 (see also Fig. 1).

### Range extension

The South African Bird Atlas Project did not record the species in Northern Province, either because of its inconspicuous nature, or its considered status as a vagrant<sup>1</sup>. The records presented here, from five additional quarter-degree squares, suggest it is more common than previously thought. Most records were in early spring and summer, suggesting that it may be seasonal in occurrence although, given that breeding occurs in September–February<sup>1,5,12,17</sup>, the records may result from an increase in the birds' activity during this period.

### Possible seasonal movements

African Broadbill is an uncommon to fairly common localised resident in south-central Africa<sup>10</sup>. Known

**Table 1.** African Broadbill *Smithornis capensis* records in the Soutpansberg (see Fig. 1).

Site	Locality	Alt. (m a.s.l.)	Grid Ref	Date	Identification	Reference
1	Bluegumspoor	1,320	22°59'30"S 29°55'20"E	Nov 1997	seen & heard	E. Eastwood
2	Freshwoods Farm	1,100	23°00'20"S 29°57'15"E	Dec 1992	heard	S. Venter & J. Crafford
3	Roodewaai Forest	1,020	23°00'15"S 30°01'20"E	Dec 1992	seen & heard	S. Venter & J. Crafford
4	Goedehoop forest station	860	23°04'10"S 30°07'40"E	Nov 1998	heard	M. Holford
5	Softwaters Farm	760	23°04'20"S 30°08'30"E	Nov/Dec 1998	seen & heard	M. Holford
6	Goedgevonden	750	23°04'25"S 30°08'50"E	Nov 1995	heard	A. Muller
7	Ratombo Forest	900	23°02'30"S 30°11'50"E	Nov/Dec 1999	seen & heard	This study
8	Entabeni (Safcol Offices)	820	23°02'35"S 30°13'15"E	-	seen	A. Bester
9	Vireers Farm	700	23°04'20"S 30°14'00"E	Oct–Dec 1999	seen & heard	this study
10	Matiwa	1,350	22°58'40"S 30°15'10"E	Jan 1997	seen & heard	D. Pretorius
11	Matiwa	1,350	22°59'55"S 30°15'35"E	-	seen & heard	A. Bester
12	Mutshindude Valley	1,100	22°58'S 30°17'E	18 Oct 1985	-	Tarboton <i>et al</i> <sup>10</sup>
13	Thathe Vondo	1,320	22°52'30"S 30°20'40"E	Oct 1976	seen & heard	Tarboton <i>et al</i> <sup>10</sup>
14	Gaba Forest	980	22°46'20"S 30°43'20"E	Jan 1998	heard	S. Venter

from the eastern highlands of Zimbabwe<sup>17</sup>, additional high-altitude records during the breeding season suggest that it moves into the region to nest. It was recorded by Swynnerton in the upper Buzi River basin<sup>5</sup> and, more recently, a pair was recorded at Tsanga River, Nyanga (1,860 m), in December 1998<sup>9</sup>, with three records from the Bvumba Highlands, eastern Zimbabwe (max. altitude 1,911 m)<sup>15</sup>. These records, together with those presented here, are mostly from the breeding season. The female ringed at Levubu (site 9) on 1 October 1999 was recaptured in the same place on 6 December 1999, when it had a prominent brood patch and another, possibly a male, was heard calling nearby. On 13 November and 5 December 1999, at Ratambo Forest (site 7), a male was observed in the same place giving the conspicuous *tttt-rrrrrrrrrrrr* call. It may have been holding territory, and was possibly breeding.

No evidence exists to suggest that broadbills are migratory<sup>10,11</sup>, although some species may be nomadic or perform altitudinal movements in response to food availability and prevailing weather conditions<sup>11</sup>. African Broadbill presence in the Levubu–Louis Trichardt area may be seasonal, with a post-breeding return to the Mozambique lowveld in winter. The vegetation of the Levuhvu and Mutale rivers is predominantly riverine (pers obs), providing ideal habitat through which local movements could occur. It may, however, be resident, being inconspicuous when not breeding and calling.

### Conservation implications

The recent South African IBA (Important Bird Areas) inventory did not record the presence of African Broadbill in the Soutpansberg (SA 003)<sup>1</sup>. Habitat destruction, especially in heavily populated areas, threatens this species and it is considered regionally Vulnerable<sup>11,12</sup>. The region through which the Levuhvu and Mutale rivers flow, before reaching Kruger National Park, is populated by rural settlements of the former Venda homeland. Slash-and-burn agriculture is practised and there is no control over the clearing of bush and development of farmlands (S Venter pers comm). If this habitat is important as a migratory corridor for broadbills and other species between northern Kruger National Park and the Soutpansberg it requires conservation.

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9). The African Bird Club funded bird-ringing equipment. ♀

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School of Botany and Zoology, University of Natal, P Bag X01, Scottsville, 3209, KwaZulu-Natal, South Africa.

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